

AMENDMENTS TO THE CLAIMS

1 and 2. (Cancelled)

3. (Previously Presented) A method for controlling the pressure in an electrohydraulic braking system having a pump, an accumulator and a valve arrangement controlling pressure at a vehicle brake, comprising the steps of:
sensing an accumulator pressure;
comparing the sensed accumulator pressure to a preset pressure set-point;
controlling at least one valve in the valve arrangement to allow fluid to flow through the valve if the sensed accumulator pressure at least equals the preset pressure set-point;
determining that the pump is running while accumulator pressure is above a pump shut-off pressure; and
providing a signal to bias the at least one valve to rapidly open to a point in excess of that which would be demanded based on accumulator pressure alone in anticipation of further pressure rise due to the pump failing to shut off.

4. (Previously Presented) The method defined in Claim 18 further comprising the step:

controlling a release valve in the valve arrangement to allow excess fluid to flow into a reservoir if the sensed pressure at least equals the preset pressure set-point and a pressure at a vehicle brake is above a demanded pressure.

5. (Cancelled)

6. (Previously Presented) The method defined in Claim 4 further comprising the step:

acting in a first manner if the accumulator pressure at least equals the preset pressure set-point with the pump being off; and

acting in a second manner if the accumulator pressure at least equals the preset pressure set-point with the pump being on.

7. (Previously Presented) The method defined in Claim 6 wherein the first manner of acting comprises opening the apply and release valves a first amount of opening to allow flow therethrough; and

the second manner of acting comprises anticipatively opening the apply valves a second amount of opening, greater than said first amount of opening, to allow flow therethrough.

8. (Original) The method defined in Claim 6 wherein the first manner of acting comprises opening the apply and release valves a first amount of opening to allow flow therethrough; and

the second manner of acting comprises anticipatively opening additional apply and release valves to allow flow therethrough.

9 through 14. (Cancelled)

15. (Previously Presented) The method of controlling pressure in an electrohydraulic braking system defined in Claim 19 wherein the braking system includes a second apply valve and a second release valve operating at respective initial positions to control pressure at a respective second brake, the anticipative function additionally opening both the second apply valve and the second release valve toward

respective positions more open than their respective initial positions point when the pressure of the fluid supplied by the source of pressurized fluid is above a pressure relief set-point and operation of the at least one of the motor and the pump is sensed and the pressure of the fluid supplied by the source of pressurized fluid is above the desired pump shut-off set-point.

16. (Original) The method of controlling pressure in an electrohydraulic braking system defined in Claim 15 wherein the anticipative function biases both the second apply valve and the second release valve toward respective positions more open than the positions that would be assumed based on solely the difference between the pressure of the fluid supplied by the source of pressurized fluid and the pressure relief set-point.

17. (Cancelled)

18. (Previously Presented) The method defined in Claim 3 further comprising the step:

controlling an apply valve in the valve arrangement to allow excess fluid in the accumulator to flow out of the accumulator if the sensed accumulator pressure at least equals the preset pressure set-point.

19. (Previously Presented) A method of controlling pressure in an electrohydraulic braking system having a source of pressurized fluid for which a maximum desired fluid pressure value has been determined, at least one hydraulically operated brake, an apply valve associated with the at least one brake for controlling pressurized fluid flow between the source and the at least one brake, a release valve associated with the at least one brake for controlling fluid flow from the at least one brake to a low pressure reservoir, and a controller controlling operation of the apply

valve and the release valve, wherein the source of pressurized fluid includes a motor-driven pump, the method comprising:

controlling pressure at the at least one brake by at least one of closing the associated release valve and opening the associated apply valve to increase pressure at the at least one brake, closing the associated apply valve and opening the associated release valve to reduce pressure at the at least one brake, and closing both the associated apply valve and the associated release valve to hold pressure at the at least one brake, wherein operation of at least one of the motor and the pump being sensed and provided as input to the controller; and

when sensed pressure of the source exceeds the maximum desired fluid pressure value, controlling pressure of the source of pressurized fluid by simultaneously electrically opening both the associated apply valve and the associated release valve from the positions required to control pressure at the at least one brake a sufficient amount to permit pressurized fluid from the source of pressurized fluid to flow through the associated apply valve and the associated release valve to the low pressure reservoir to lower pressure at the source of pressurized fluid below the maximum desired fluid pressure value;

wherein the input to the controller indicating operation of at least one of the motor and the pump is an input to an anticipative function which biases the apply valve and the release valve toward a more open initial position than would be assumed based on solely the difference between a pressure of the fluid supplied by the source of pressurized fluid and a pressure relief set-point when operation of the at least one of the motor and the pump is sensed and the pressure of the fluid supplied by the source of pressurized fluid is above a desired pump shut-off set-point.

20. (New) The method defined in Claim 19 where, when operation of the at least one of the motor and the pump is sensed and the pressure of the fluid supplied by

the source of pressurized fluid is above a desired pump shut-off set-point, the pressure at the vehicle brake is a non-zero positive pressure.

21. (New) The method defined in Claim 4 where the pressure at the vehicle brake is a non-zero positive pressure.

22. (New) A method for controlling the pressure in an electrohydraulic braking system having a pump with an associated pump turn-on pressure setpoint and an associated pump shut-off pressure setpoint, an accumulator, a valve arrangement controlling pressure at a vehicle brake, and an electronic control unit sensing a braking demand, sensing accumulator pressure, and controlling operation of the pump and the valve arrangement; comprising the steps of:

controlling pressure at the vehicle brake using the valve arrangement under the control of the electronic control unit;

turning on the pump under the control of the electronic control unit to supply pressurized fluid to the accumulator when the pressure in the accumulator decreases to the pump turn-on pressure setpoint, and turning off the pump when the pressure in the accumulator rises to the pump turn-off pressure setpoint except that when a large increase in braking demand is sensed by the electronic control unit, anticipatively turning on the pump before pressure in the accumulator decreases to the pump turn-on pressure setpoint.